Postal Regulatory Commission
Submitted 7/28/2014 3:55:24 PM
Filing ID: 90088
Accepted 7/28/2014

Before the
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Periodic Reporting
(Proposals Three Through Eight)

Docket No. RM2014-6

INITIAL COMMENTS OF THE PUBLIC REPRESENTATIVE
(July 28, 2014)

I. INTRODUCTION

On June 20, 2014, the Postal Service submitted a petition pursuant to 39 CFR 3050.11, requesting the Commission initiate an informal rulemaking proceeding to consider changes to six analytical methods for use in periodic reporting.[1] On June 26, 2014, the Commission issued Order No. 2103, appointing the undersigned Public Representative and established a Comment deadline of July 28, 2014.[2]

The Public Representative is generally satisfied that the data provided supports Postal Service Proposals Three through Seven. In several instances, the Public Representative offers suggestions for improving the accuracy of the proposed changes. The Public Representative notes the revisions to the relevant analytical methodologies will represent an improvement over current methodologies. However, the Postal Service fails to provide the crucial calculations supporting Proposal Eight both in the Petition and its Response to the Chairman's Information Request No. 1.[3]

---

[1] Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposals Three Through Eight), June 20, 2014 (Petition). The Petition was accompanied by public and nonpublic Excel files. With respect to Proposal Six; *see also* Docket No. RM2011-3, Notice of the United States Postal Service of Filing Proposal to Update Highway Variabilities, June 20, 2014.

[2] Order No. 2103, Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Proposals Three Through Eight) June 26, 2014 (Order No. 2103).

[3] Chairman's Information Request No. 1 (Revised), Docket No. RM2014-6, July 15, 2014 (CHIR No. 1).

Consequently, the Public Representative is unable to adequately examine Proposal Eight, and requests the Commission refrain from issuing an approval until the Postal Service duly provides the necessary information and all parties have had the opportunity to properly analyze the data.

II. COMMENTS

A. Proposal Three: Revision to Parcel Return Service Full Network Cost Model

1. The Postal Service's Current Methodology/Status

Based on the financial data the Postal Service reported for FY 2013, the revenue from Parcel Return Service Contract 4 did not cover costs.[4] The current cost model for Parcel Return Service Contract 4 uses the transportation costs of Parcel Select Non-Presort as a proxy for the transportation costs of Parcel Return Service Contract 4. In the FY 2013 ACD proceeding, the Postal Service stated that this proxy was not appropriate for FY 2013. The Postal Service argued that the size characteristics of the proxy category change significantly.[5] The Postal Service proffers a methodological change in the calculation of transportation costs for Parcel Return Service Contract 4 to adjust for the change in circumstances regarding the transportation cost of the underlying proxy category.

2. Explanation of the Postal Service's Proposal Three

The Postal Service proposes to adjust the transportation cost of the proxy category by the adjusting the transportation cost commensurate with the difference in

[4] See FY 2013 Annual Compliance Determination at 82-83.

[5] See FY13 ACR Postal Service Response to CHIR No. 2, question 2 and Response to CHIR No. 5 Question 11.

cube between the proxy category and the actual partner volume. The Postal Service has filed both the full explanation of this calculation and the spreadsheets that perform the adjustment under seal. As the Postal Service notes, when the contract was filed, the average weight of Parcel Select Non-Presort and the average weight of Parcel Return Service Contract 4 were expected to be the similar. The Postal Service states that in FY 2013, "average weight of a Parcel Select Non-presort piece has increased, whereas the average PRS contract piece remained much lighter."[6]

Functionally, the Postal Service proposes to adjust estimated (by proxy) transportation costs to account for the differences in weight (and thus cube) between the proxy category and the contract data.

3. PR Analysis of the Postal Service's Proposal Three

The Public Representative has reviewed the information provided under seal by the Postal Service. The Accompanying workpapers follow the methodology broadly described in the Public filing associated with Proposal 3. The Public Representative agrees with the concept proffered by the Postal Service. However, the precision of the costing methodology for Parcel Return Service Contract 4 could be improved.

First, on the topic of transportation costs germane to this proposal. The Postal Service proposes to adjust the transportation costs by the differences between the proxy category and the actual contract data. This is idea is reasonable. The Public Representative further agrees that cube drives transportation costs. However, the calculation for the cube of both the partner and the proxy category are estimates developed using a regression, not recorded information. There is a recorded difference in weight, but there is not recorded difference in cube. While it is likely that there is a

[6] Petition at 3.

difference in cube, this cannot be proven given the available information. The difference in pound per item is clear. While it would be more accurate to use cube data, if it was available, it is better to use actual information that an implied estimate. As such, the Public Representative suggests that the transportation methodology should rely on weight data instead of cube estimates.

Second, the Public Representative has concerns regarding the delivery cost estimates for Parcel Return Service Contract 4. The Non-Public file "PRCContract4_PRSFN_FY13_Proposed.xls" tab "PartnerProfile" contains key delivery cost inputs in cells c7 and c8. The Public Representative requests that the Commission further evaluate the suitability of these cost inputs, and search for data with more reliable sources that can be used.

B. Proposal Four: Proposed Change in International Mail Costing Methodology

The Postal Service proposes to change the current methodology for estimating the costs of the International Priority Airmail (IPA) product, and several other products, presented in the International Cost and Revenue Analysis (ICRA) report. The Postal Service also proposes to discontinue four tables in the ICRA report that present data on competitive outbound products to Canada, Mexico, and countries categorized by the UPU as target or transition system countries.

The IPA product is a competitive product featuring rates of general applicability. It provides a commercial, volume-based airmail service for outbound letterpost, *i.e.*, First-Class Mail International letters, postcards, large envelopes (flats), and Outbound Single-Piece First-Class Package International Service. As such, volumes are transported via the priority or air transportation network of the designated postal operator in the country of destination.

Volume for the IPA product is relatively small. Nearly 98 percent of total IPA volume is entered through Global Plus Contracts, *i.e.*, Negotiated Service Agreements (NSAs) specifically, the Global Plus 1C and 2C products.[7] The remaining 2 percent of total IPA volume that is not entered through an NSA is reported as volume for the IPA product.[8]

1. The Postal Service's Current Methodology/Status

Proposal Four was prompted by the Commission's finding in the FY 2013 Annual Compliance Determination (ACD) that the IPA product did not comply with section 3633(a)(2) of PAEA.[9] The Commission finding followed from the fact that the IPA product reported a loss in FY 2013. As a result, the Commission directed that the Postal Service provide an analysis of the cause of the loss. *Id.* The Commission also directed that the Postal Service recommend modifications to its current methodology of developing costs for the IPA product and, if necessary, propose the modifications in a rulemaking. *Id.*

Proposal Four is the Postal Service's response to the Commissions' directive. In its description of Proposal Four, the Postal Service identifies what it calls "a gross to net weight" issue.[10]

---

[7] Reply Comments of the United States Postal Service, Docket No. ACR2013, February 14, 2014, at 7, n. 21.

[8] Because IPA is a service for outbound letterpost, UPU letterpost regulations, including terminal dues, are applicable to IPA pieces. In addition, IPA pieces are sealed against inspection. MCS § 2320.1.c.

[9] 2013 Annual Compliance Determination, Docket No. ACR2013, March 27, 2014 (ACD), at 86.

[10] Petition, Proposal Four at 3, *citing* Responses of the United States Postal Service to Questions 1-14 of Chairman's Information Request No. 3, Docket No. ACR2013, January 27, 2014, Question 11.

Under the current methodology, total costs for IPA, comprised of the costs of IPA volumes entered pursuant to NSAs and volumes entered through the IPA product, *i.e.*, IPA non-NSA volumes, are initially developed by combining country data, settlement charges and international air transportation costs estimated from *gross weight* data provided by SIRVO. [11] Importantly, settlement charges and international transportation costs represent nearly 90 percent of the total costs of IPA.[12] In addition, domestic statistical systems provide estimates for mail processing, delivery and other costs incurred by IPA, which are also used to develop total IPA costs.[13]

In a separate operation, costs are developed for IPA volumes entered pursuant to NSAs. More specifically, settlement charges and international transportation costs for such volumes are developed from a dataset that generates only *net weight* data.[14] Gross weight data are not included in the dataset. *Id.* The resulting costs, including costs for mail processing, delivery and other, are subtracted from the total costs initially developed for IPA. For FY 2013, these remaining or "residual" costs were reported in the ICRA as costs for the IPA product.

The Postal Service states that this methodology "essentially attributes all" of the costs associated with mail shipping containers, representing the tare weight, *i.e.*, the

[11] Petition, Proposal Four at 4. The System for International Revenue and Volume, Outbound (SIRVO) is a statistical sampling system that is used to develop revenue, pieces, and weight estimates for outbound letterpost and parcels. SIRVO also provides country-specific data to support the settlement process with foreign postal operators concerning terminal dues (letterpost) and inward land rates (parcels).

[12] Docket No. ACR2013, Library Reference USPS-FY13-NP2 (Revised 2-6-14), Excel file Reports(Booked).xls, worksheet tab B Pages (c).

[13] Petition, Proposal Four at 4.

[14] Petition, Proposal Four at 3. The Postal Service adds that the dataset also includes revenue, pieces and net weight data for pieces entered through NSAs as Priority Mail Express International (PMEI), ePackets, Global Direct Entry Outbound (GDEO), Global Express Guaranteed (GXG),and Priority Mail International (PMI) envelopes and parcels. *Id.*

difference between gross and net weight, included in the development of settlement charges and international transportation costs to the "residual" IPA product, *i.e.*, IPA non-NSA volumes. *Id.* at 4. The Postal Service adds that "There is no solution to estimating the residual costs [for the IPA non-NSA volume] that is free of assumptions, as gross and net weight relationships can vary" between IPA NSA volumes IPA non-NSA volumes. *Id.*

2. Explanation of the Postal Service's Proposal Four

The Postal Service proposes to implement a new methodology to develop settlement charges and international transportation costs. Under the new methodology, gross and net weight relationships are assumed to be same for IPA NSA volumes and IPA non-NSA volumes, resulting in settlement charges and international transportation costs being developed using only net weights. By using net weight, the cost per pound for IPA NSA volumes will be higher compared to the cost per pound calculated under the current methodology for IPA non-NSA volumes, which is based on gross weight. As a result, the new methodology will transfer some additional settlement and international transportation costs from IPA non-NSA volumes to IPA NSA volumes.

For consistency, the Postal Service proposes to use the new methodology to develop settlement charges and international transportation costs for ePackets, Priority Mail (PMI) parcels and PMI envelopes. *Id.* at 5.

The Postal Service also proposes to discontinue four tables presented in the ICRA report that provide volume, revenue and cost data on competitive outbound

products to Canada, Mexico, and by target and transition system countries. In the ICRA for FY 2013, these tables appear on pages A-3, A-4, B-3 and B-4.[15]

The Postal Service states that the reporting of this competitive product data for Canada, Mexico, target and transition system countries is a "carryover" from the organization of the ICRA prior to the PAEA, and such reporting is not necessary for compliance purposes. Moreover, the allocation of volume, revenue and cost data by product to target and transition system countries requires numerous assumptions and is a time-consuming process in preparing the ICRA. Eliminating the tables would streamline preparation of the ICRA, resulting in cost savings. *Id.* at 6.

3. PR Analysis of the Postal Service's Proposal Four

The Postal Service's proposed new methodology represents an improvement over the current methodology. In this regard, the new methodology corrects the distribution of certain weight-related settlement and international transportation costs used in the development of the IPA product and several other competitive products. The Public Representative recommends Commission approval of the proposed new methodology.

With respect to the four tables, the Public Representative concurs with the Postal Service that discontinuation of such tables will not inhibit regulatory review. Based upon the Postal Service's description, the proposal is limited to discontinuing only the four tables, thereby leaving the underlying data available for special studies, if necessary. For these reasons, the Public Representative recommends the discontinuance of the tables.

[15] Docket No. ACR2013, Library Reference USPS-FY13-NP2 (Revised 2-6-14), Excel file Reports(Booked).xls, worksheet tabs A Pages (c) and B Pages (c), respectively.

C. Proposal Five: Change in Methodology of Reporting Financial Results for Inbound Exprès Service

In Proposal Five, the Postal Service proposes to change the current methodology for reporting the financial results for the Inbound Market Dominant Exprès Service Agreement 1 (Inbound Exprès Service) product presented in the International Cost and Revenue Analysis (ICRA) report. The Inbound Exprès Service product consists of rates for delivery confirmation service of inbound Exprès pieces from designated postal operators that have implemented the Exprès Service Agreement.[16]

1. The Postal Service's Current Methodology/Status

In general, the Postal Service separately reports financial results for each market dominant international product consisting of Negotiated Service Agreements (NSAs) in the ICRA. In FY 2013, the Postal Service explains that there was no activity for the Inbound Exprès Service product until the last quarter (Quarter 4) of the fiscal year.[17] This caused the financial results for the Inbound Exprès Service product to be inadvertently reported as part of the Inbound Letterpost product in the FY 2013 ICRA instead of being separately reported with the other market dominant international products consisting of NSAs. *Id.* In a library reference accompanying its Response, the Postal Service also provided the inbound Exprès volumes by country, Delivery

[16] The Exprès Service Agreement is a multilateral agreement with the designated postal operators of certain member countries of the UPU, including the Postal Service. Exprès service provides for the cross-border delivery of letterpost at UPU terminal dues rates tendered as Exprès and displaying the Common Logo of Exprès. *See* Notice of United States Postal Service of Type 2 Rate Adjustment, and Notice of Filing Functionally Equivalent Agreement, Docket No. R2011-6, August 12, 2011; *see also* Docket No. R2011-6, Order No. 876, Order Adding Inbound Market Dominant Exprès Service Agreement 1 to the Market Dominant Product List, September 26, 2011.

[17] Proposal Five at 1, *citing* Responses of the United States Postal Service to Questions 1-14 of Chairman's Information Request No. 3, Docket No. ACR2013, January 27, 2014, Question 8 (Response).

Confirmation unit costs, the amount of the PRIME annual membership fee, and the calculations for total cost and contribution.[18]

Based upon this information, the Commission reported the financial results for the Inbound Exprès Service product in a separate line in the FY 2013 Annual Compliance Determination (ACD) report.[19] To do so, the Commission subtracted the number of inbound letterpost pieces tendered as Exprès from the total volume reported for the Inbound Letterpost product. The Commission also subtracted the delivery confirmation revenue and costs, including the PRIME annual membership fee, associated with inbound Exprès pieces from the total revenue and costs reported for the Inbound Letterpost product.

The Postal Service states that reducing the total volume of Inbound Letterpost by the number of inbound Exprès pieces is not correct. Proposal Five at 2. The total volume reported by the Commission does not equal the total volume of Inbound Letterpost reported in the ICRA. *Id.* In addition, the Commission-reported Inbound Letterpost volume for Target and Transition system countries, or both, is incorrect because the sum of such volumes does not equal the adjusted total of Inbound Letterpost reported by the Commission. *Id.*

[18] *Id.* PRIME is the name of "an initiative by a number of postal operators, in association with the International Post Corporation, to develop and improve value added letters services." PRIME offers member posts "with a system that collects and monitors dispatch and delivery data about Registers, Exprès and Insured services." *http://www.ipc.be/en/Operational-services/Capability-visibility/PRIME*.

[19] *See* Notice of Filing of Library References PRC-ACR2013-LR1 through PRC-ACR2013-LR6 and PRC-ACR2013-NP-LR1, Docket No. ACR2013, and the Excel files PRC-ACR2013-NP-LR1_Booked ICRA and PRC-ACR2013-NP-LR1_Imputed ICRA.

2. Explanation of the Postal Service's Proposal Five

The Postal Service proposes to separately report the financial results for the Inbound Exprès Service product using a methodology that would treat the product in a manner similar to that of a special service. In this regard, the Postal Service observes that the Inbound Exprès Service product consists only of revenue and costs associated with the delivery confirmation service as it is an add-on or extra service to the host inbound letterpost piece. *Id.* at 3.

In the ICRA, therefore, revenue and costs associated with the host inbound letterpost piece when tendered as Exprès will be reported with the Inbound Letterpost product, and revenue and costs associated with the delivery confirmation service, including the PRIME annual membership fee, will be reported with the Inbound Exprès Service product. The volume of inbound letterpost tendered as Exprès will be included in the total of the Inbound Letterpost product, and separately reported with the Inbound Exprès Service product. However, the volume separately reported for Inbound Exprès Service product will not be added to the volume total of the Inbound Letterpost product to avoid double counting—as is the current treatment for special services.

3. PR Analysis of the Postal Service's Proposal Five

The Public Representative considers Proposal Five to be an improvement over the current methodology. Going forward, the proposed methodology will avoid the double counting of volumes in the Inbound Letterpost product and separately report volumes for the Inbound Exprès Service product. It will also ensure that the revenues and costs associated with the delivery confirmation service are removed from the Inbound Letterpost product and separately reported with the Inbound Exprès Service product in the ICRA. The Public Representative recommends Commission approval of Proposal Five.

D. Proposal Six: Updating the Highway Transportation Variabilities

1. The Postal Service's Current Methodology/Status

The Postal Service uses highway transportation variabilities[20] to determine "the levels of attribution for purchased highway transportation expenses in Cost Segment 14."[21] In other words, the Postal Service applies highway transportation variabilities in its calculation of the attributable (volume variable) costs for purchased highway transportation. Purchased highway transportation is an important part of the Postal Service's transportation network that covers a range of highway transportation types.[22] The Postal Service currently uses highway transportation variabilities calculated in Docket No. R2000-1, when the underlying methodology and the estimated variabilities were accepted by the Commission.[23]

[20] The term "variability" (or, more precisely, "volume variability") represents the "cost elasticity", with respect to a change in volume. *See, e.g.* PRC Glossary of Postal Terms, *http://www.prc.gov/prc-pages/misc/help/U-Z.pdf*.

[21] Petition, Proposal Six at 1. Product attributable costs for Cost Segment 14 (CS14), "Transportation" are published in the Annual Compliance Report. *See e.g*. Docket No. ACR-2013, USPS-FY13-2 - FY 2013 Public Cost Segments and Components Report, file FY13.Public CS&CRpt.Revised.xls, tabs 'CSSummary' and 'CS14'. The file cs14.fy13.nonpublic.xls, a part of USPS-FY13-NP2, includes CS14 inputs and outputs for CRA model as well as detailed cost calculations. Public version of this file (CS14P_FY13_filed.xls) has been included with the Library Reference USPS-RM2014-6/1 filled in a current Docket.

[22] *See* Library Reference USPS-RM2014-6/1, Report on Updating the Cost-to-Capacity Variabilities for Purchased Highway Transportation, June 2014 at 1 (Report).

[23] Postal Rate Commission, Opinion and Recommended Decision, Volume 1, Docket No. R2000-1, November 13, 2000, at 169-170. (R2000-1, PRC Opinion). The econometric analysis used to estimate purchased highway variabilities, was presented in Docket No. R2000-1 by Michael Bradley. *See,* USPS-T-18, Direct Testimony of Michael D. Bradley on Behalf of United States Postal Service, Docket No. R2000-1, January 12, 2000. (R2000-1, USPS-T-18).

Variability of purchased highway transportation cost has two parts: "capacity with respect to volume[24] and variability of cost with respect to capacity."[25] While the elasticity of the first part has not received extensive empirical analysis and has been considered as 1.0,[26] the elasticity of the second part has been based on the comprehensive analysis that involved advanced econometric techniques. As the Postal Service points out, Docket No. R2000-1 "put forth a refined analysis of the variability of purchased highway transportation." It maintained the same economic theory and econometric model as previous analysis, but applied them to more refined (disaggregated) account structure. [27] There were 17 different variabilities estimated from 17 econometric equations developed by account category and a type of transportation activity.[28] Estimated in Docket No. R2000-1 and currently used variabilities (elasticities of cost) were measured as the "percentage response in cost for a percentage change in the cost driver."[29]

[24] This is "the elasticity of the cubic-foot-miles (CFM) of capacity purchased relative to a change in the overall volume of mail using the transportation segment being analyzed". Report 2 and R2000-1, PRC Opinion at 169.

[25] Report at 2. This is the "elasticity of the cost of purchased transportation relative to change in the cubic-foot-miles of capacity purchased." *Id.*

[26] *Id.*

[27] Report at 5. Although currently used methodology was developed in Docket R2000-1, this approach was first discussed in Docket No. R87-1, and then was going through some modifications in Dockets Nos. R97-1 and R2000-1. The initial research associated with a development of the current methodology for calculating cost variability goes back to Dockets Nos. R80-1 and R84-1. *See* Report at 3-5 and R2000-1, USPS-T-18 at 1-19.

[28] See, R2000-1, USPS-T-18 at 19-22.

[29] Report at 13. For purchased highway transportation, in 15 out of 17 econometric equations, the Postal Service assumes that cost driver is the cubic foot-miles of transportation used. In two box-contract equations, the number of the boxes replaces the cubic-foot miles. Report at 2, 12-13 and R2000-1, USPS-T-18 at 21.

2. Explanation of the Postal Service's Proposal Six

Proposal Six of the current Docket, encompasses a subject, which has been broadly discussed in Docket No. RM2011-3. In the Order No. 1626, the Commission set "near-term research priorities", and identified one of them as "recalculating the elasticity of purchased transportation costs with respect to purchased transportation capacity."[30] In Response to PRC Order No, 1626, the Postal Service confirmed its intention to perform "the research required for updating the various cost elasticities."[31] The Postal Service expected to complete such research by the end of the 2013. *Id*. In the Order No. 1829, the Commission summarized the Postal Service's research activity related to these "near-term priorities" (and, particular, those performed with respect to the volume variability of purchased highway transportation capacity).[32]

In the current docket, the Postal Service proposes to "update the variablilities used to determine the levels of attribution for purchased highway transportation expenses in Cost Segment 14."[33] The Postal Service emphasizes that "the appropriate unit of the analysis is the contract cost segment, not the contract.[34]

As the Postal Service states, the main reason for Proposal Six is the concern that some or all of the purchased highway transportation variabilities has been changed

[30] Order Setting Near-Term Priorities and Requesting Related Reports. January 18, 2013, at 2-3 (PRC Order No. 1626).

[31] Postal Service Report Regarding Cost Studies: Response to PRC Order No. 1626, April 18, 2012 at 22 (Response to PRC Order No. 1626).

[32] Summary of the Recent Research Activity and Inquiry Regarding Timetable for Completing Analyses and Applying Results. September 5, 2013 at 2. (PRC Order No. 1829).

[33] Petition, Proposal Six at 1.

[34] *Id.* Although in most instances, a contract cost segment is identical to a contract (since most contracts have only one cost segment), in some instances a single contract covers more than one type of transportation and, therefore, includes a few contract segments. *Id.* at 1-2.

since they were last examined in Docket No. R2000-1 - more than 13 years ago. Since then, the Postal Service has made multiple operational changes such as: (1) rationalizing its contract structure by reducing (a) the length of the contracts and, in some areas, (b) the number of contracts; and (2) reorganizing its mail processing network (which could have an impact on transportation network).[35] Also, the accrued cost of purchased transportation is $3 billion, now.[36]

In the current docket the Postal Service lists four major steps required for updating the variability analysis: identifying a data source, specifying the model to be estimated, model estimation itself and review of the results. Report at 6.

As the Postal Service points out, data source used to estimate variabilities in Docket 2000-1 and prior dockets, Highway Contract Support System (HCSS), is no longer exist. *Id.* In the current Docket the Postal Service relies on data from Transportation Contract Support System (TCSS).[37] The Postal Service has developed the dataset for the econometrical analysis extracting data from TCSS in the fourth quarter of FY2013. *Id*.

Overall methodology for econometric analysis includes setting highway account sub-categories (for which variabilities will be estimated), developing the set of econometric equations (e.g. selecting a functional form and variables for each equation)

[35] PRC Order No. 1626 identified a number of reasons for further research that could result in recalculation of "cost elasticity of purchased highway transportation with respect to changes in capacity using current data". Two other issues not mentioned here were (1) possible revision of the current econometric model and (2) potential change in modeling the relationship between changes in mail volume and changes in purchased highway transportation capacity. PRC Order No. 1626 at 6.

[36] *See* Report at 5-6 and USPS-RM2014-6/1, file "CS14P_FY13_Filed", tab 'Outputs to CRA'.

[37] The Postal Service had previously examined and rejected a few other data sources (Transportation Information Management Evaluation System – TIME and Surface Visibility data systems). *See*, PRC Order No. 1829 at 2.

and calibrating the model (identifying and removing the outliers from the original dataset, performing statistical tests).[38] Using the updated dataset and econometric model, the Postal Service recalculates purchased highway transportation variabilities. The Postal Service also updates FY2013 Cost Segment 14 with new variabilities and recalculates highway attributable costs for each domestic mail product.[39] Percentage change in highway attributable cost due to the updated variabilities varies for different products: it is in the range between -0.6%, for Single Piece Parcel Post and 8.3%, for In-County Periodicals. Report at 32. As a result of the updated variabilities, total highway attributable costs for domestic products (market dominant and competitive) have increased by $52.2 million (or 2.1%). The impact of such increase on overall attributable cost is 0.1 percent.[40]

If approved, the recalculated variabilities presented in Proposal Six, will be incorporated into future Annual Compliance Reports, as early as for the current fiscal year.[41]

3. PR Analysis of the Postal Service's Proposal Six

The Postal Service chooses a reliable data source for the analysis. The Postal Service has built a dataset for econometric analysis using the TCSS data extracted in

[38] In USPS-RM2014-6, the Postal Service provides SAS programs it developed and used to estimate the variabilities (files "Est.IntePDC.Clust.Area.NDC.Variab" and "Est.Intr.PNDC.Dist.Variab"), as well as program logs and outputs of these programs (Technical Appendix at 8-66).

[39] USPS-RM2014-6/1, files "CS14P-FY13_Filed_Updat_Variab", tabs 'Inputs-Variabilities' and 'Outputs to CRA'.

[40] Calculated using data from Table 11, Report at 32 and USPS-RM2014-6/1, file "Effects.Updat.Hwy.Variab,Pub", tab 'Change in VV Costs'.

[41] Docket No. RM2011-3. Notice of the United States Postal Service of Filing Proposal to Update Highway Variabilities. June 20, 2014 at 1.

the fourth quarter of FY2013 when the analysis was initiated.[42] In calculation of variabilites, the Postal Service uses annual (and not quarterly) cost and transportation data[43] and performs comprehensive and well-documented econometric analysis. The overall methodology for calculation of highway volume variabilities is consistent with the previous study approved by the Commission in Docket No. R2000-1. However, the Public Representative has a few concerns regarding the updated variability analysis, and they are summarized below.

(a) Data Analysis

Almost three hundred of contract cost segments are excluded from econometric analysis without any explanation.

The number of contract cost segments in the FY2013 TCSS dataset the Postal service uses for econometric analysis is 15,869. Report at 8. This number is consistent with the number of contract cost segments the Public Representative calculated using data provided directly in tcss_fy13 SAS dataset file included in USPS-RM2014-6/1. However, the number of observations in the initial estimation shown in Tables 3 and 4 is 15,592, which is by 277 observations less than it should have been. [44] While Report contains comprehensive and solid discussion on the process of identifying and removing the outliers (Report at 18-27), it does not mention anything about the reason for the difference between the number of initial contract cost segments in TCSS extract and the number of cost segments used as observations for initial regression analysis.

[42] *See* Report at 6, and Responses of the United States Postal Service to Questions 1-8 of Chairman's Information Request No. 1, July 21, 2014 (Responses to CHIR No. 1), Question 2a.

[43] *See* USPS-RM2014-6/1, file "tcss_fy13" and Technical Appendix at 6.

[44] Corrected Tables 3 and 4 are in: Responses to CHIR No. 1, Question 4.

However, the number of removed outliers is only 81 – much less than the number of observations removed without any explanation.

The Public Representative investigated the possible reason for the discrepancy described above, and found that certain highway accounts were omitted from calculations.[45] Assuming that these accounts are not related to any account groups selected for econometric analysis (Report at 11, Figure 2), the total number of contract cost segments would be correct. However, the Postal Service does not provide any explanation why certain highway accounts are irrelevant to the analysis. The Public Representative has noticed a gap between the discussion and presentation of 15,869 contract cost segments and further analysis of 15,592 contract cost segments only.[46] At the same time, in the previous study performed in Docket No. R2000-1, there has been a special table providing the number of observations in each account identified by both account number and account description (category, type).[47] For transparency and clarification purposes, the Public Representative suggests the Commission request the Postal Service explain why certain highway account categories were omitted from its analysis.

(b) Econometric Analysis

The Postal Service does not provide any sufficient justification for removal of the unusual observations from the data set. However, such removal results in higher

[45] The following highway accounts are omitted, Nos.: 53136, 53138, 53183 and 53191. See: USPS-RM2014-6/1, tcss_fy13. SAS dataset file, column 'account'.

[46] Report at 6-8. As the Postal Service emphasizes, contract cost segment is an appropriate unit of analysis. Report at 7. Each observation that is subject to the econometric analysis represents a contract cost segment. In regression equations, observations are grouped by account category and technology type as explained on p. 10 of the Report. In tcss_fy13 SAS dataset of the USPS-RM2014-6/1, each contract cost segment is identified by both the highway contract number ('route') and cost segment code ('costsegmentcode'). *See* also Technical Appendix at 6.

[47] R2000-1, USPS-T-18 at 25, Table 3.

variabilities estimated from the majority of econometric equations. This leads to an increase in highway attributable costs, which, in its extent, appears not to be property justified.

Detection and removal of the outliers (unusual observations) is an important part of the Postal Service's econometric analysis subject to the current docket. Report at 18-27. The Postal Service eliminated the observations that it identified as outliers and then re-run the regression model. Although this approach is similar to that pursued by the Postal Service in Dockets Nos. R97-1 and R2000-1, it raises a concern. [48] As illustrated below, the econometric model appears to be very sensitive to a removal of even a small number of observations. In 12 out of 17 cases, removing the observations from the dataset resulted in an increase of variablities (in comparison with an original estimation with outliers in place). [49] The increase in variabilities ranges from 1.0 to 5.0 percent. Report at 27. Since the increased varaibilities lead to the increased highway attributable costs (and, finally, overall attributable costs), the method for detecting and removal outliers requires special consideration.

Among outliers the Postal Service identifies the unusual observations that "could have a disproportionate impact on the results and thus skew the estimated variabilities away from their true values". Report at 18. However, as it is easy to see from the information provided by the Postal Service, the estimated variabilities might be very sensitive to a very slight change in the data set. Thus, for Intra P&DC (City), removal of only 3 observations (which constituted less than 1% of the original dataset) resulted in

[48] R2000-1, PRC Opinion at 174 and R2000-1, USPS-T-18 at 39-40.

[49] Each case represents an econometric equation used to calculate the variabilies.

5% increase in a variability. For Intra P&DC (Van), removal of less than 0.5% of the observations followed by more than 4% increase in variability.[50]

Although the Public Representative acknowledges the applied method for identifying outliers, the criterion for choosing candidates for removal does not seem to be properly justified. Just setting a critical Cook's D measure greater than 0.1 as a criterion for identifying candidates for removal (how it was done in the current econometric study) is convenient, but arbitrary and might not produce the best economic results. As the Postal Service correctly notes, there is no statistically-based critical value for Cook's D. Report at 23. The Public Representative suggests that in some cases, especially when removal of observations significantly changes the variability, it will be useful to perform some additional investigation *why* an observation is unusual. This would be consistent with the best practices in the field of econometric analysis.[51] Below are a few steps worth considering:

First, it might be useful to either introduce additional explanatory variables into the model or modify the form of the regression equation. This could deliver a better econometric fit then it was in the original estimation, but without any removal of the observations. Initially, the Postal Service considered conducting the research related to possible revision of the econometric model. *See* PRC Order No. 1626 at 6. However, in the current study the Postal Service does not provide any review of such research and uses the established econometric model.[52] Although application of translog function for

[50] These and other similar examples can be found by combining the information from Table 4 and Table 6 of the Report at 25 and 27.

[51] For more details *see, e.g.,* Fox, John, "Applied Regression Analysis and Generalized Line Models": Sage Publications, Second Edition, 2008 at 260-261 and 607-628.

[52] Because the Commission has already adopted translog function in three rate case, the Postal Service decided neither identify nor estimate any other functional form for econometric equation in this docket. *See,* Responses to CHIR No. 1, Question 5b.

all estimated regression equations is convenient and consistent with the previous analysis, it might be reasonable (at least for some account sub-categories) to test a slightly different regression model.

Second, robust regression, an alternative method of regression analysis, has proved to be effective for dealing with datasets that contain outliers. Instead of fully removing the outliers, robust regression assigns low weights for them.[53] This econometric approach could yield better results and produce more accurate volume variabilities.

E. Proposal Seven: Modification of the Standard Mail Destination Entry Cost Model and the Standard Mail Parcel Mail Processing Cost Model

The Postal Service is proposing a sweeping redesign of the Standard Mail Destination Entry Cost Models, both for Transportation costs and Mail Processing Costs. Currently, this analysis is performed across four workbooks. The Postal Service proposes to consolidate these calculations into one workbook. The consolidation is cosmetic, but the change in underlying calculations is not.

1. Postal Service's Current Methodology/Status

The method that the Postal Service uses to isolate the transportation and non-transportation costs of dropshipped Standard Mail predate the PAEA. The purpose of the cost methodology is to estimate the cost of transporting Standard Mail to the DDU, DSCF, and DNC. This process provides valuable insight as to the incentives the Postal Service can efficiently offer to mailers to dropship mail. As noted by the Postal Service, the overall cost methodology and formulas used to develop standard mail cost

[53] *See* Huber Peter, Ronchetti M. Elvezio, "Robust Statistics", John Wiley and Sons, Second Edition, 2009.

avoidances were developed in Docket No. MC1995-1. The workpapers for Docket No. MC1995-1 are no longer on the Commission website in easily accessible form, therefore detailing the history of the current methodology is quite difficult. What is clear is that during the PAEA era there have been two methodologies for calculating transportation costs of dropshipped standard mail: Letter and Flat costs have been calculated using an equation, and Parcel costs have been calculated as a remainder. The equation used to calculate Letter and Flat costs is: Transportation Equation: (Yorigin * Xorigin) + (YDNDC * XDNDC) + (YDSCF * XDSCF) = ZT.

As further detailed in "PROP.7.USPS-FY13-13.xls" tab "Results Trans," the cost of each leg of transportation is modelled, and the equation is solved for X origin, which is the cost of transporting non-dropshipped mail. This equation is also applied to Standard Mail as a whole. Note that, historically, the equation has not been applied to Standard Parcels.

The file "USPS-FY13-13.STD_TOTAL.xls" was used for the calculation of Standard Mail Parcel Transportation costs in FY2013, just as the file "STD DEST ENT TOTAL.xls" was used in FY 2009. Both have the exact same methodology. As an example, consider DDU dropshipped Standard Mail. The equation above is used to estimate the cost for the Postal Service to transport the average pound of Standard Mail Letters, Flats, and Standard Mail as a whole to the DDU. The Parcel DDU cost is calculated as a remainder. The Letter and Flat unit costs are multiplied by their volume share, and the left over amount is assigned to Parcels. As Standard Mail Parcel volume has declined, the fidelity of this method has decreased.

2. Explanation of Postal Service's Proposal Seven

The primary change the Postal Service is proposing is to extend the methodology used to calculate Letters and Flats to Parcels. Thus, instead of calculating Parcel unit

costs as the remainder of Letter and Flat costs compared to the total, Parcel costs will be calculated using a separate equation, both for transportation and non-transportation cost estimates. Transportation and Non-Transportation costs share a broad methodology, the equation described above. However, the inputs used in these two equations are quite different. As always, the quality of the equation output is dependent on the quality of the data used in the equation. Here, it is valuable to consider the Transportation and Non-Transportation separately.

(a) Transportation Methodology – Underlying data sources

The Postal Service proposes to extend the broad Transportation methodology to Parcels, but it also extends the specific methods and data used in Letters and Flats. This is an agreeable task, because the B workpapers contain granular Standard Mail Parcel Transportation costs. In the file USPS-FY13-32 file "CS14.xls," Standard Mail parcel costs are a line item. In the equation model, accurate estimates of the portion of mail that is dropshipped at the DDU, DSCF, and DNC are crucial for accurate cost estimation. The Postal Service does not have the information required to develop accurate estimates of Parcel volume by dropship location. The Postal Service develops a method in PROP7.USPS-FY13-12 tab "Mail Entry Profile." This complex method generates a reasonable result. The Public Representative reviewed the FY 2014 Q4 Standard Mail Billing Determinants as an alternate source for dropship information. The following table details the dropship distribution for FY 2013 Q4.

	FY 2013 Q4 Standard Mail Parcels Pounds	**Percent**
No Destination Entry	1,739,682	30.16%
NDC Destination Entry	1,175,081	20.37%
SCF Destination Entry	1,757,085	30.46%
DDU Destination Entry	1,097,020	19.02%
Total	**5,768,868**	

The distribution by entry point is within 1 percent of the FY 2013 estimates generated in the tab "Mail Entry Profile." It is important to note how different the entry profile of Standard Mail Parcels is compared to Letters and Flats.[54] The Transportation inputs used by the Postal Service tie directly back to both the RPW and the B workpapers (and thus the CRA). It is also important to note that the step by step calculations for Parcels match Letters are Flats. Some of the inputs for this analysis have not been updated for more than 10 years.[55]

(b) Non-Transportation Methodology – Underlying data sources

The Transportation cost model is constructed as a top-down model. The CRA has a line item for transportation costs, by product. The Transportation costs are de-averaged across a range of component offerings. When performed correctly, the de-averaged costs add back up to the total costs. The Non-Transportation cost model is a bottom-up cost model, as it is not directly tied to the CRA. The following table compares the total Non-Transportation costs for Standard Mail under the proposed and current Methodology.

[54] Over 30 percent of Standard Parcels are entered at origin, by weight. 13 Percent of Letters and 8 percent of Flats are entered at origin. The Public Representative further notes that 65 percent of Parcels entered at Origin are mailed at Non-Profit prices.

[55] Regarding the inputs for the calculation of transportation costs, one particular inputs stands out as out of date and questionably relevant. In workbook "PROP.7.USPS-FY13-13.XLS" tab "Trans Cost Adj," Intra-SCF and POV transportation costs are adjusted downward by a factor of 0.8357. The source of this adjustment is Docket No. R2000-1 USPS-T-27 Attachment K table 4. (PDF page 132) *http://www.prc.gov/Docs/20/20202/usps-test-t27.pdf*. The adjustment factor is "The Percentage of Intra-SCF highway and POV costs avoided by DDU Bound Printed Matter Parcels. The Commission should evaluate if this adjustment factor is still applicable to Standard Mail.

Standard Mail Non-Transportation Costs					
	Current Method	Proposed Method			
Letters	$ 178,170,849	$89,825			
Flats	$ 54,913,189	$40,208			
Total	$ 219,094,546	$130,032			
Source:					
Current Method "USPS-FY13-13.STD_Letters" tab "Total NonTrans CPP" cell I7					
Current Method "USPS-FY13-13.STD_Flats" tab "Total NonTrans CPP" cell I7					
Current Method "USPS-FY13-13.STD_Total" tab "Total NonTrans CPP" cell I7					
Proposed Method "PROP.7.USPS-FY13-13" tab "NonTrans CPP" Cells I8, I16,(I8+I16+I24)					

As the Postal Service notes in its proposal, there was an error in the Standard Letter Model that led to the overestimation of Letter Non-Transportation costs. Nonetheless, the new inputs proposed by the Postal Service dramatically decrease Non-Transportation costs by 40 percent. The Non-Transportation costs decline because the Productivities developed in 2009 by a special study are significantly higher than the previous estimates. As an example, consider DSCF dropshipped Standard Flat Pallets.

		Cost Per Pound	
Facility	**Operation**	**Current Method**	**Proposed Method**
DSCF	Unload Pallet	$ 0.0030	$0.0024
DSCF	Crossdock Pallet	$ 0.0042	$0.0030
DSCF	Load Pallet	$ 0.0028	$0.0024
Total		$ 0.0099	$0.0078
			-21.22%

As part of the Postal Service's proposal, the 2009 Parcel Mail/NFM field study will be used for productivity inputs. The following table is from the Public Representative's Comments on the proposal that implemented those productivities.[56]

Facility	Task	Measured Productivity	Minimum	Maximum	Count	Standard Deviation
DU	Load Rolling Stock	62.799	222.22	24.00	54	46.44
DU	Load Pallet / Pallet Box	35.629	49.59	26.79	5	9.32
DU	Unload Rolling Stock	62.799	222.22	24.00	54	46.44
DU	Unload Pallet / Pallet Box	35.629	49.59	26.79	5	9.32
DU	Incoming Secondary Parcel Sort	413.432	1472.73	229.57	27	232.44
P&DC	Unload Rolling Stock	52.348	240.00	22.86	28	57.56
P&DC	Unload Pallet / Pallet Box	45.056	72.00	29.03	5	16.43
P&DC	Crossdock Rolling Stock	64.532	90.68	16.13	11	24.82
P&DC	Crossdock Pallet / Pallet box	36.000	44.44	25.21	6	6.52
P&DC	Load Rolling Stock	52.348	240.00	22.86	28	57.56
P&DC	Load Pallet / Pallet Box	45.056	72.00	29.03	5	16.43
NDC	Unload Rolling Stock	35.698	206.90	15.23	68	40.38
NDC	Unload Pallet / Pallet Box	41.379	240.00	8.53	50	39.84
NDC	Unload Postal Pak	48.130	189.47	18.85	26	33.87
NDC	Induct Bedloaded Parcels	748.683	891.35	655.56	2	118.76
NDC	Induct Rolling Stock	38.179	50.97	13.22	11	10.85
NDC	Induct Pallet / Pallet Box	19.209	53.73	9.09	18	13.31
NDC	Induct Postal Pak	26.297	57.14	10.93	20	14.12
NDC	IPP Manual Sort	896.780	1123.10	503.34	2	438.24
NDC	Dump Sacks	137.698	176.84	114.80	3	35.24
NDC	Load Rolling Stock	56.653	130.43	23.90	130	24.26
NDC	Load Pallet / Pallet Box	52.348	240.00	22.86	28	57.56
NDC	Load Postal Pak	21.346	65.22	11.26	34	10.93

The Productivity at the heart of the DSCF Non-Transportation cost is "P&DC" "Unload Pallet/ Pallet Box." That productivity was calculated using 5 observations.

Unlike the Transportation cost model proposed changes, the Non-Transportation cost model proposed change is a wholesale update of the model.

[56] See Docket No. RM 2010-12 PR Comments at 13 http://www.prc.gov/Docs/70/70432/PR%20Cmts%20Order%20No.%20534.pdf.

3. PR Analysis of Postal Service's Proposal Seven

Concerning the Transportation model, the Public Representative supports implementation of the proposed changes. The PR commends the Postal Service for accurately developing a complex model that reflects CRA costs and RPW volumes.

The proposed changes to the Non-Transportation model are more complex. The current productivities are clearly out of date, and based on a conception of the network that is past its sell by date. But the Postal Service's mail processing network has also changed significantly in the 5 years since the 2009 Parcel Field study. Productivities for Allied operations are difficult to accurately gauge, and likely vary substantially by plant. The proposed changes do not have fatal flaws; rather they suffer from a lack of support. The Public Representative suggests that the Commission request additional data before implementing the proposal. Such data could include further operational details in support of the changes. Additionally, if the Postal Service may be able to provide a link between the decrease in Handling costs and supporting information from MODS.

The impact of the Non-Transportation costs may have an impact in the passthroughs for dropshipped Standard Mail Flats. In FY 2013 the discount for DSCF Flats was 20.9 cents per pound. The decrease in Non-Transportation costs leads to a decrease in avoided cost from 21.6 cents per pound to 21.1 cents per pound for DSCF Flats. The current dropshipping discount for Standard DSCF Flats is 21.6 cents per pound.

F. Proposal Eight: Changes in Attributable Costs Related to USPS Tracking

1. Postal Service's Current Methodology/Status

The Postal Service has begun to offer USPS tracking at no extra charge for several shipping products. Historically, USPS Tracking has been an "Other Ancillary

Service" offered at an extra charge. This change has created an issue with the attribution of Tracking costs to products. The Postal Service proposes to change the distribution method for assigning Tracking Costs. The current methodology is to use IOCS tallies to distribute Tracking Costs. The Postal Service proposes to use Point of Service (POS) data for the distribution of costs.

2. Explanation of the Postal Service's Proposal Eight

The Postal Service proposes to use data from the POS to assign window acceptance costs appropriately between the paid USPS Tracking Service and the host pieces. In its proposal, the Postal Service notes that there are two components to this proposal.[57]

1) Attribute costs related to final, en-route and non-window acceptance scans to the host product, not to the USPS Tracking Service. Perform the calculations in the B workpapers rather than make a D report adjustment. Thus, the cost model for USPS Tracking in NP26 will no longer be needed for the D report adjustment.

2) In IOCS, for window-related acceptance costs use the percentage of volume from the Point of Service (POS) retail system that paid for the extra service to attribute costs to USPS Tracking.

As described by the Postal Service, the Public Representative is unsure of how the new methodology will work. As the Public Representative understands it, the new methodology is to continue to attribute total Tracking costs using the IOCS. Instead of distributing those costs using an IOCS distribution key (with the needed encirclement rules), the Postal Service will isolate the volume of tracked mail using POS data.

[57] Petition at Proposal 8, page 2.

3. PR Analysis of Postal Service's Proposal Eight

In CHIR No. 1, the Commission requested additional information from the Postal Service regarding Proposal Eight. Specifically, the Commission requested the distribution key of the Current Methodology and the Proposed Methodology. The Public Representative has reviewed the documents filed under seal by the Postal Service, and has not been able to ascertain the cause of the differences in the distribution key. As such, the Public Representative has concurrently filed a Motion for Issuance of Information Request that details the information the Public Representative believes would be helpful for the evaluation of the Postal Service's Proposal. The Public Representative will comment on the appropriateness of Proposal Eight when sufficient information has been provided.

III. CONCLUSION

The Public Representative recommends the Commission approve Proposals Four and Five in their entirety and respectfully offers improvements to the methodologies for Proposals Three, Six, and Seven. Regarding Proposal Eight, the Public Representative finds the Postal Service provided insufficient data to justify the proposal and asks the Commission, by way of a Motion for Issuance of Information Request, to obtain the Postal Service's underlying calculations.

Respectfully Submitted,

/s/ Tracy N. Ferguson
Tracy N. Ferguson
Public Representative for
Docket No. RM2014-6

901 New York Avenue, N.W.
Washington, DC 20268-0001
(202) 789-6880; Fax (202) 789-6891
e-mail: Tracy.Ferguson@prc.gov

/s/ Lyudmila Y. Bzhilyanskaya
Lyudmila Y. Bzhilyanskaya
Public Representative Team

/s/ James F. Callow
James F. Callow
Public Representative Team

/s/ J.P. Klingenberg
J.P. Klingenberg
Public Representative Team